

REMARKS

I. Introduction

Claims 1-23 are pending. In the Office Action mailed October 5, 2004, the Examiner rejected claims 1, 2, 5-8, 13 and 23 under 35 U.S.C. 103(a) as being unpatentable over Soliman (U.S. Patent No. 6,490,460) in view of Kamel (US 2002/0123362). The Examiner additionally rejected the remaining claims under 35 U.S.C. 103(a) as being unpatentable over Soliman in view of various combinations of Kamel, Dohi (US Patent No. 6,341,224), Cheng (U.S. Patent No. 6,154,638), Kamel 2 (U.S. Patent No. 6,496,531) and Hogan (U.S. Patent No. 6,442,393).

Applicant filed a response on December 6, 2004 to provoke an Advisory Action. In the Advisory Action, the Examiner stated that "the cited references more than adequately support the rejection of the claims" but did not otherwise address Applicant's specific remarks. Applicant respectfully disagrees and traverses these rejections, in light of the present amendments and remarks and in light of the remarks filed on December 6, 2004, for at least the following reasons.

II. Response to Rejection of Independent Claims 1, 7, 14, 16, 21 and 23

The Examiner rejected independent claim 1 as being unpatentable over the combination of Soliman and Kamel. Claim 1 is directed toward a method of controlling power used for communications between a mobile station and a base station, and it provides for "determining a location of the mobile station," and "based on the location, selecting an initial power level of a primary communication channel for communication between the mobile station and the base station." The initial power level is then used as the starting point for a power control process that regulates the power used on the primary communication channel for communications between the mobile station and the base station. Neither Soliman nor Kamel teaches or suggests all

elements of this claim, including selecting an initial power level of a primary communication channel based on a location of a mobile station.

As described in Applicant's prior responses, Soliman uses lookup tables to determine, based on the location of the mobile station, minimum and maximum permissible signal-to-noise ratios ("SNRs") on the reverse link (e.g., from the mobile station to the base station) and/or minimum and maximum transmit powers for the base station on the forward link (e.g., from the base station to the mobile station). While Soliman uses a power control loop to keep within these determined ranges, the beginning power levels for the power control loops do not vary depending on the location of the mobile station. Recognizing this deficiency, the Examiner relied on Kamel as teaching an initial power level, and starting at the initial power level engaging in a power control process that regulates power used for communication between a mobile station and a base station. However, Kamel suffers from the same deficiency as Soliman – its initial power level is not based on the location of the mobile station.

Kamel relates to "estimating the initial power level and transmission rate of a burst on a secondary channel." (Abstract). Thus, Kamel does not teach or suggest "selecting an initial power level of a primary communication channel," as is claimed by Applicant – let alone based on the location of the mobile station. Specifically, Kamel teaches using the power level at the end of a previous burst or the current power level of a primary communication channel as an indicator of the initial power level for a current burst on a secondary channel. (¶0033, lines 1-4; ¶0035, lines 1-4). In neither of these two operations described in Kamel is the initial power level of the burst on the secondary channel based on the location of the mobile station.

Because Kamel explicitly teaches that selection of the initial power level is based on the power of a prior burst or the current power of a primary communication channel, any

modification to select the initial power level based on a location of the mobile station would necessarily change the principle of operation of Kamel. Such a modification would be an impermissible modification and would fail to establish a prima facie case of obviousness. Moreover, neither Soliman nor Kamel teach or suggest using some criteria (e.g., the location of the mobile station) as a basis for varying an initial power of a primary communication channel. In Soliman the initial power level is fixed and does not vary, and in Kamel it is only the power level of the secondary communication channel that is varied. Therefore, none of the cited references teach or suggest Applicant's claimed element of varying the initial power level of a primary communication channel.

Additionally, "the mere fact that the references can be combined or modified does not render the resultant combination obviousness unless the prior art suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ 1430 (Fed. Cir. 1990); MPEP § 2143.01. In this case, Soliman and Kamel do not suggest the desirability of any such combination. Kamel's principle of operation, as previously described, is to select the initial power of a burst on the secondary communication channel on the ending power of a prior burst or on the current power of the primary communication channel. Therefore, it unquestionably does not suggest the desirability of wholly abandoning this principle of operation and basing starting power level on some other characteristic. Moreover, Soliman simply does not offer any suggestion as to the desirability of varying the starting point for its power control loop. Applicant respectfully submits that the proposed modification to use location as a starting point for Solimon's power control loop impermissibly uses the hindsight afforded by Applicant's own disclosure (which describes various benefits associated with varying the starting power level based on the location of the mobile station), and therefore does not make a prima facie case of obviousness.

Accordingly, claim 1 is allowable. Independent claims 7, 14, 16, 21 and 23 include similar elements of selecting an initial transmit power based on a location of a mobile station and then using that initial transmit power as the starting point for a power control process. For the reasons discussed with respect to claim 1, these independent claims are also allowable. Therefore, claims 1-23 are all in condition for allowance.

III. Response to Rejection of Claim 3

Claim 3 is additionally allowable, because none of the cited references teach or suggest sending to the mobile station an instruction to transmit at the selected initial power level, as recited in claim 3. Dohi uses control bits in a feedback mechanism to indicate whether to increase or decrease the transmission power of an object station. (Col. 4, lines 19-34). A current Signal-to Interference plus Noise power Ratio (SIR) is compared with a target SIR, and the control bits are then used to adjust the transmit power, thereby also adjusting the SIR. Thus, the control bits are not even used as part of setting an initial transmit power, they are only used once the object station has already started transmitting.

Moreover, the control bits do not even denote specific power levels. Rather, they are just flags to indicate whether to increase or decrease a current power level. In fact, the control bits cannot even specify the amount of the increase or decrease that should be performed, and they certainly cannot specify a particular power level. Therefore, they are not even capable of indicating an initial transmit power level. Therefore claim 3 is additionally allowable, because Dohi does not teach or suggest sending an instruction to a mobile station to transmit at the selected initial power level.

IV. Conclusion

Applicant respectfully submits that claims 1-23 are all in condition for allowance. Should the Examiner have any questions, the Examiner is encouraged to contact Applicant's attorney, Brian Harris, at his direct dial number of 312-913-3303.

Respectfully submitted,

Date:

4/5/05



Brian R. Harris
Reg. No. 45,900
Attorney for Applicant

McDonnell Boehnen Hulbert & Berghoff LLP
300 South Wacker Dr., 31st Floor
Chicago, IL 60606
Tel: 312-913-0001
Fax: 312-913-0002